



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Admistrative Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,358	12/22/2003	Randy Zimler	01098	9330
38516	7590	07/20/2010		
AT&T Legal Department - SZ Attn: Patent Docketing Room 2A-207 One AT&T Way Bedminster, NJ 07921			EXAMINER LOO, JUVENA W	
			ART UNIT 2473	PAPER NUMBER
			MAIL DATE 07/20/2010	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/743,358	Applicant(s) ZIMLER ET AL.
	Examiner JUVENA LOO	Art Unit 2473

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

Status

- 1) Responsive to communication(s) filed on 17 June 2010.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-15 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date June 17, 2010
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date: _____
 5) Notice of Informal Patent Application
 6) Other: _____

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of Application No. 11/223604. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Application Number: 10/743358	Application Number: 11/223604
1. <i>A method of providing communications services, comprising:</i>	<i>1 A method of providing communications services, comprising:</i>
<i>receiving a request for communications service from the residential gateway in the subscriber's premises;</i>	<i>receiving a request for data from a residential gateway in a customer's premises;</i>
<i>logically bonding a first physical medium to a residential gateway in a subscriber's premises;</i>	<i>logically bonding a first physical medium to the residential gateway;</i>
<i>connecting the second physical medium to another residential gateway in another subscriber's premises;</i> <i>sharing the second physical medium amongst the subscriber's premises and the another subscriber's premises;</i>	<i>temporarily dedicating and logically bonding a second physical medium to the residential gateway, the second physical medium physically connected to multiple residential gateways in other customers' premises;</i>
<i>providing the requested communications</i>	<i>providing the data via the logically bonded</i>

<i>service via the logically bonded first physical medium and the temporarily dedicated and logically bonded second physical medium;</i>	<i>first physical medium and the second physical medium to the residential gateway;</i>
	<i>determining that the request for data exceeds a combined maximum bit rate for the logically bonded first physical medium and the second physical medium;</i>
	<i>invoking a feedback mechanism that prompts the residential gateway to select other content;</i>
<i>reverting the second physical medium to its shared configuration, thus allowing the another residential gateway to receive increased bandwidth when required</i>	<i>reverting the second physical medium to its shared configuration when the additional bandwidth is no longer needed to allow another residential gateway to receive increased bandwidth.</i>

3. Claim 15 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of Application No. 11/223604. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Application Number: 10/743358	Application Number: 11/223604
15. A method of providing communications services, comprising:	1 A method of providing communications services, comprising:

<i>receiving a request for communications service from a residential gateway in the customer's premises;</i>	<i>receiving a request for data from a residential gateway in a customer's premises;</i>
<i>logically bonding a first physical medium to the residential gateway;</i>	<i>logically bonding a first physical medium to the residential gateway;</i>
<i>temporarily dedicating and logically bonding a second physical medium to the residential gateway, the second physical medium being dynamically dedicated and shared amongst multiple residential gateways to provide additional bandwidth when required;</i>	<i>temporarily dedicating and logically bonding a second physical medium to the residential gateway, the second physical medium physically connected to multiple residential gateways in other customers' premises;</i>
<i>providing the communications service via the logically bonded first physical medium and the second physical medium;</i>	<i>providing the data via the logically bonded first physical medium and the second physical medium to the residential gateway;</i>
	<i>determining that the request for data exceeds a combined maximum bit rate for the logically bonded first physical medium and the second physical medium;</i>
	<i>invoking a feedback mechanism that prompts the residential gateway to select other content;</i>
<i>when the additional bandwidth is no longer needed, reverting the second physical medium to its shared configuration, thus allowing the another residential gateway to receive increased bandwidth when</i>	<i>reverting the second physical medium to its shared configuration when the additional bandwidth is no longer needed to allow another residential gateway to receive increased bandwidth.</i>

<i>required</i>	
-----------------	--

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 – 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Grant et al. (US 7,142,503 B1).

Regarding claim 1, a *method of providing communications services, comprising: logically bonding a first physical medium to a residential gateway in a subscriber's premises* (Grant: see Figure 1 and column 6, line 50 – column 7, line 8; see also column 7, lines 48 - 64; each serviceable location (household or office

environment) 14 – 28 including a home-gateways or XDSL modem is connected to network 12);

connecting a second physical medium to the residential gateway in a subscriber's premises (Grant: see Figures 1 and 3; column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 8, lines 3 – 22 and lines 36 – 45; see also various serviceable location can be linked other gateways in the neighborhood via links through cable or coax) to form a virtual neighborhood network (VNN));

connecting the second physical medium to another residential gateway in another subscriber's premises (Grant: see Figures 1 and 3; column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 8, lines 3 – 22 and lines 36 – 45; see also various serviceable location can be linked other gateways in the neighborhood via links through cable or coax) to form a virtual neighborhood network (VNN));

sharing the second physical medium amongst the subscriber's premises and the another subscriber's premises (Grant: see Figures 1 and 3; column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 8, lines 3 – 22 and lines 36 – 45; see also various serviceable location can be linked other gateways in the neighborhood via links through cable or coax) to form a virtual neighborhood network (VNN));

receiving a request for communications service from the residential gateway in the subscriber's premises (Grant: see Figure 4 steps 204 – 206 and column 11, lines 6 – 7);

when the requested communications service exceeds an available bandwidth of the first physical medium, then temporarily dedicating and logically bonding the second physical medium to the residential gateway in the subscriber's premises to provide additional bandwidth, such that first physical medium and the second physical medium share a session of information (Grant: see Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 - 54);

providing the requested communications service via the logically bonded first physical medium and the temporarily dedicated and logically bonded second physical medium (Grant: see Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 – 54; see also Figure 3 and column 10, lines 4 – 26; see also column 4, lines 53 - 64); and

when the additional bandwidth is no longer needed, removing the temporary dedicated and logical bonding of the second physical medium (Grant: see Figure 4 and column 11, lines 1 – 26); and

reverting the second physical medium to its shared configuration, thus allowing the another residential gateway to receive increased bandwidth when required (Grant: see Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 – 54; see also Figure 3 and column 10, lines 4 – 26; see also column 4, lines 53 - 64).

Regarding claim 2, *wherein logically bonding the first physical medium comprises logically bonding a twisted pair* (Grant: see column 7, lines 9 – 12).

Regarding claim 3, *wherein logically bonding the first physical medium comprises logically bonding a coaxial cable* (Grant: see column 6, line 60 – column 7, line 12).

Regarding claim 4, *wherein logically bonding the first physical medium comprises logically bonding a fiber optic cable* (Grant: see column 6, line 60 – column 7, line 12).

Regarding claim 5, *wherein providing the requested communications service comprises transmitting signals via at least one of i) a combination of a twisted pair and a coaxial cable, ii) a combination of a twisted pair and a fiber optic cable, and iii) a combination of a coaxial cable and a fiber optic cable* (Grant: see column 6, line 60 – column 7, line 12).

Regarding claim 6, *further comprising temporarily dedicating and logically bonding additional physical media to the residential gateway, each additional physical media dynamically shared with the another residential gateway to provide additional bandwidth* (Grant: see Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 – 54; see also Figure 3 and column 10, lines 4 – 26; see also column 4, lines 53 - 64).

Regarding claim 7, *providing the requested communications service comprises transmitting signals via a shared twisted pair* (Grant: see Figure 1 and column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 7, lines 9 – 12;

Art Unit: 2473

each serviceable location (household or office environment) 14 – 28 including a home-gateways or XDSL modem is connected to network 12).

Regarding claim 8, *further comprising temporarily dedicating and logically bonding n physical media to the residential gateway, such that first physical medium and the n physical media share the same session of information* (Grant: see Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 – 54; see also Figure 3 and column 10, lines 4 – 26; see also column 4, lines 53 – 64; there can be more than one secondary paths through the virtual neighborhood network (VNN) to provide the additional resources required).

Regarding claim 9, *a method of providing communications services, comprising: configuring a first twisted pair to provide Digital Subscriber Line service to a residential gateway in a subscriber's premises* (Grant: see Figure 1 and column 6, line 50 – column 7, line 8; see also column 7, lines 48 - 64; see also column 7, lines 9 – 12; each serviceable location (household or office environment) 14 – 28 including a home-gateways or XDSL modem is connected to network 12);

configuring a second twisted pair for shared Digital Subscriber Line service amongst the residential gateway and another residential gateway in another subscriber's premises (Grant: see Figures 1 and 3; column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 8, lines 3 – 22 and lines 36 – 45; see

also various serviceable location can be linked other gateways in the neighborhood via links through cable or coax) to form a virtual neighborhood network (VNN);

receiving a request for communications service from the residential gateway
(Grant: see Figure 4 steps 204 – 206 and column 11, lines 6 – 7);

transmitting digital subscriber line signals to the residential gateway via the first twisted pair (Grant: see Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 - 54);

when the requested communications service exceeds an available bandwidth of the first twisted pair, then temporarily dedicating and logically bonding the second twisted pair to the residential gateway to provide additional bandwidth (Grant: see Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 - 54);

providing the requested communications service via the logically bonded first twisted pair and the temporarily dedicated and logically bonded second twisted pair (Grant: see Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 – 54; see also Figure 3 and column 10, lines 4 – 26; see also column 4, lines 53 - 64); and

when the additional bandwidth is not needed, removing the temporary logical bonding of the second twisted pair from the residential gateway (Grant: see Figure 4 and column 11, lines 1 – 26); and

reverting the second twisted pair to its shared configuration, thus allowing the another residential gateway in the another subscriber's premises to receive increased bandwidth when required (Grant: see Figure 4 and column 11, lines 1 – 26; see also

column 13, lines 35 – 54; see also Figure 3 and column 10, lines 4 – 26; see also column 4, lines 53 - 64).

Regarding claim 10, *further comprising sharing the same session of information* (Grant: see Figures 1 and 3; column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 8, lines 3 – 22 and lines 36 – 45; see also various serviceable location can be linked other gateways in the neighborhood via links through cable or coax) to form a virtual neighborhood network (VNN)).

Regarding claim 11, *further comprising connecting the second twisted pair and the first twisted pair to the residential gateway, such that first twisted pair and the second twisted pair share the same session of information* (Grant: see Figures 1 and 3; column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 8, lines 3 – 22 and lines 36 – 45; see also various serviceable location can be linked other gateways in the neighborhood via links through cable or coax) to form a virtual neighborhood network (VNN)).

Regarding claim 12, *further comprising transmitting the digital subscriber line signals to the residential gateway via a third dedicated twisted pair, the third dedicated twisted pair shared amongst the residential gateway in the subscriber's premises and the another residential gateway in the another subscriber's premises, the third twisted pair providing more additional bandwidth* (Grant: see Figure 4 and column 11, lines 1 –

26; see also column 13, lines 35 – 54; see also Figure 3 and column 10, lines 4 – 26; see also column 4, lines 53 – 64; there can be more than one secondary paths through the virtual neighborhood network (VNN) to provide the additional resources required).

Regarding claim 13, *further comprising instructing a network device to logically bond the second twisted pair and the first twisted pair when transmitting the digital subscriber line signals to the subscriber's premises, such that first twisted pair and the second twisted pair share the same session of information* (Grant: see column 4, lines 52 - 64).

Regarding claim 14, *further comprising dedicating and logically bonding n twisted pairs to the first twisted pair when transmitting the digital subscriber line signals to the residential gateway, such that first twisted pair and the n twisted pairs share the same session of information* (Grant: see Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 – 54; see also Figure 3 and column 10, lines 4 – 26; see also column 4, lines 53 – 64; there can be more than one secondary paths through the virtual neighborhood network (VNN) to provide the additional resources required).

Regarding claim 15, a *method of providing communications services, comprising:*

receiving a request for communications services from a residential gateway in a customer's premises (Grant: see Figure 4 steps 204 – 206 and column 11, lines 6 – 7);

logically bonding a first physical medium to the residential gateway (Grant: see Figure 1 and column 6, line 50 – column 7, line 8; see also column 7, lines 48 - 64; each serviceable location (household or office environment) 14 – 28 including a home-gateways or XDSL modem is connected to network 12);

temporarily dedicating and logically bonding a second physical medium to the residential gateway, the second physical medium being dynamically dedicated and shared amongst multiple residential gateways to provide additional bandwidth when required (Grant: see Figures 1 and 3; column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 8, lines 3 – 22 and lines 36 – 45; see also Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 – 54; various serviceable location can be linked other gateways in the neighborhood via links through cable or coax) to form a virtual neighborhood network (VNN));

providing the communications services via the logically bonded first physical medium and the second physical medium (Grant: see Figures 1 and 3; column 6, line 50 – column 7, line 8; see also column 7, lines 48 – 64; see also column 8, lines 3 – 22 and lines 36 – 45; see also Figure 4 and column 11, lines 1 – 26; see also column 13, lines 35 – 54; various serviceable location can be linked other gateways in the neighborhood via links through cable or coax) to form a virtual neighborhood network (VNN)); and

when the additional bandwidth is no longer needed, reverting the second physical medium to its shared configuration, thus allowing another residential gateway to receive increased bandwidth when required (Grant: see Figure 4 and column 11,

lines 1 – 26; see also column 13, lines 35 – 54; see also Figure 3 and column 10, lines 4 – 26; see also column 4, lines 53 - 64).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUVENA LOO whose telephone number is (571)270-1974. The examiner can normally be reached on Monday - Friday: 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JUVENA LOO
Examiner
Art Unit 2473

Application/Control Number: 10/743,358
Art Unit: 2473

Page 16

July 15, 2010

/KWANG B. YAO/
Supervisory Patent Examiner, Art Unit 2473